

JPRS 76614

14 October 1980

# China Report

ECONOMIC AFFAIRS

No. 91



FOREIGN BROADCAST INFORMATION SERVICE

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [ ] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

14 October 1980

# CHINA REPORT

## ECONOMIC AFFAIRS

No. 91

### CONTENTS

#### NATIONAL ECONOMIC POLICY

Use of Foreign Capital To Speed Up Development Urged  
(He Xinhao; GUOJI MAOYI WENTI, Jun 80)..... 1

Uphold Principle of Pricing According to Value  
(Peng Zhenyuan, Li Jinq; TIANJIN RIBAO, 10 Jun 80).... 10

Production Problems of Beijing Picture Tube Plant  
Described  
(He Dazhang; JINGJI GUANLI, No 8, 15 Aug 80,  
pp 14-17)

[For the text of this article, see pages L 10 to L 15 of the  
National Affairs section of the 3 October 1980 FBIS People's  
Republic of China DAILY REPORT]

#### ECONOMIC PLANNING

Economic Journal Summ Up Jiangsu Experience  
(Wang Bingshi; JINGJI GUANLI, 15 Jul 80)..... 14

#### GENERAL ECONOMIC INFORMATION

Improved Management, Administration of Tourism Called  
For  
(Liu Shijie, Wang Ligang; JINGJI GUANLI, 15 Apr 80).... 28

Nei Monggol Conference Reports 470 Job-Related Deaths  
(Nei Monggol Regional Service, 27 Sep 80)..... 35

FUELS AND POWER

Waste Heat Used for Power Generation in Sichuan (Zhong Jinqi; SICHUAN RIBAO, 4 Jun 80).....	36
--	----

MINERAL RESOURCES

Developments in Mining Automation Reported (Liu Zuoshu, et al; MEITAN KEXUE JISHU, Jul 80).....	38
--	----

CAPITAL CONSTRUCTION

Tianjin Housing Proceeds, But Many Problems Remain (TIANJIN RIBAO, 13 Jun 80).....	44
---	----

FOREIGN TRADE

Briefs Guangdong Reexport Processing	47
---	----

## NATIONAL ECONOMIC POLICY

### USE OF FOREIGN CAPITAL TO SPEED UP DEVELOPMENT URGED

Beijing GUOJI MAOYI WENTI [INTERNATIONAL TRADE JOURNAL] in Chinese No 2, Jun 80 pp 16-21

[Article by He Xinhao [0149 2450 3185]: "Actively Use Foreign Capital To Speed Up Economic Development"]

[Text] At present, people of the whole country, high and low, are studying and exploring ways to speed up our economic development. We think that, on the basis of self-reliance, the active use of foreign capital is one of such ways. Because our country suffered a long period of aggression and exploitation by imperialism before liberation, we had a very painful experience with the importation of foreign capital. After liberation we did make use of some foreign capital, but the scale was limited; hence we actually lack relevant experience. When Lin Biao and the "gang of four" held sway, this question even became a forbidden area. As we suggest the use of foreign capital today, it is unavoidable that people are still not free of various doubts. Therefore, theoretically we must have a correct understanding, and methodologically we must carry out penetrating studies.

#### Be Steadfast; Use Foreign Capital Dauntlessly

International experience proves that the rational use of foreign capital is an effective means of accelerating economic development. In the process of their economic development, almost all of the developed countries in the world today used foreign capital; nor has there been any country which attained high-speed economic development without using foreign capital. From the time of its independence up to 1911, the United States was always an indebted country which borrowed foreign capital. Before World War II, Germany imported as much as U.S. \$4.2 billion in foreign capital between 1924 and 1930. In the early period of economic recovery after World War II, West Europe used as much as U.S. \$50 billion of foreign capital. After World War II and up to the 1970's, Japan used about U.S. \$90 billion in foreign capital at various times. As early as the 1920's and 1930's, the Soviet Union also used foreign capital; by the 1960's they were using even more, perhaps not less than U.S. \$20 billion. Of the developing countries and areas since World War II, all those whose economic growth has turned

out to be faster, such as Brazil, Mexico, Singapore, etc., have for the most part used foreign capital. Relevant statistical data indicate that the economic growth of countries using more foreign capital is faster than that of countries and areas using less foreign capital or not using any at all. In 1975, of 106 countries and areas with net capital revenues, those whose per capita gross national product was U.S. \$300-800 used an average of U.S. \$52.40 in foreign capital per capita; those whose per capita gross national product was below U.S. \$300 used an average of U.S. \$25.20 in foreign capital per capita. Of course we must see that, after the importation of foreign capital, not a few countries' economies became abnormal and lopsided and their people became increasingly impoverished. The fundamental reason was that these countries lost their political independence and could not use foreign capital freely; on the contrary they were subject to control by foreign capital. We are a socialist country, politically independent, and fully equipped with the political premise to use foreign capital.

Some people are afraid that allowing foreign countries to invest in China might strengthen the assertive power of capitalism, sabotage the planned economy of socialism, or even endanger our political independence. Although this kind of apprehension is understandable, it is nonetheless unnecessary. First of all, foreign capital has a subordinate status in the entire national economy, and some key departments limit or forbid foreign capital in direct management. This serves to guarantee that, as foreign capital is actively used, our economic lifeline is at the same time firmly in the hands of our own people. Secondly, in departments and areas where foreign capital is allowed to enter, operational activities are subject to the constraints of our law and carried out only under the supervision of our relevant organs. This guarantees that only if it is consistent with our interests can foreign capital develop its activities. Furthermore, under the condition of assuring foreign capital the opportunity to obtain legitimate profits, we also convert, through economic and administrative means, the surplus value created by our workers into the financial revenues of the state, funds for expanded reproduction of enterprises, and welfare expenses for the workers. This serves to limit the extent of exploitation by foreign capital.

On the basis of the foregoing, and under the premise of insisting on the party's leadership and the socialist road, formulating correct principles and policies, relying on the efforts of the vast ranks of the people, and then actively using foreign capital will play an important role in speeding up our socialist economic development. In this regard, we must establish a correct theoretical understanding before we can adopt positive and effective actions in practice.

#### Be Prudent and Meticulous; Use Foreign Capital Carefully

The use of foreign capital is good for making up the deficiency in our capital, good for the importation of advanced technology and equipment, good for the promotion of the establishment of new industries, good for an increase in employment, and good for the expansion of our exports. But we should

point out that we also have to pay a price for using foreign capital. In the case of such foreign capital imported, not only must its principal be repaid in full, but also interest must be paid. From the point of view of a given period, the investment is increased; from the point of view of the entire period, the amount of capital outflow has to be larger than the amount of capital influx. Calculated according to the present level of international interest rates, in about 10 years the amount of capital outflow usually doubles that of capital influx. Hence we must be very prudent and meticulous in using foreign capital. We must stand on self-reliance, give full scope to the role of our own labor power and resources, enable them to achieve the best possible unity with foreign capital, and continue to raise our economic management level and our ability to make use of foreign capital. The economic gains from the use of foreign capital must exceed the price paid for the use of foreign capital. In order to achieve this, we should pay attention to the following questions:

I. We Must Strive To Secure Foreign Capital With Greater Benefits, and Endeavor To Reduce the Price for Using Foreign Capital

Capital pursues profits, but our use of foreign capital is for the development of our economy and the improvement of our people's livelihood. A sharp contradiction therefore exists between the two aspects. The first round of struggle thus revolves around the cost of the use [of capital], and its core is the interest level involved. If we wish to strive for the kind of foreign capital that will yield greater benefits, we must achieve some understanding of the characteristics of the international money market and various kinds of capital. The sources of foreign capital today can be found basically in the following categories:

(1) Official funds: These are mainly fixed sums of funds allocated yearly by Western governments through their financial budgets. Part of these funds is directly loaned to foreign governments on a bilateral basis, called bilateral loans or aid, in the forms of grants, loans, and development loans; another part is loaned to foreign governments or enterprises through international institutions, called multilateral loans or aid. The former category makes up 80 percent of such official funds; the latter, 20 percent.

Multilateral loans or aid is issued mainly through the following international institutions: (A) The International Monetary Fund, which mainly supplies loans aimed at balancing international receipts and payments. Its present lending capacity is U.S. \$50 billion, most of which has already been borrowed. (B) The International Bank for Reconstruction and Development, namely the World Bank, which mainly supplies special loans for the development of production. Up to June 1978, loans approved amounted to U.S. \$33.1 billion; loans issued, U.S. \$19.4 billion. (C) The International Development Association, which mainly supplies loans with the greatest benefits to the least developed countries. (D) The International Finance Corporation, subordinate to the World Bank, which supplies favored loans to private enterprises in the least developed countries. (E) Regional economic commissions and local development banks under the jurisdiction of the United Nations, whose lending capacities are all rather limited.



The characteristic of official funds is their low interest, an average annual rate of 2 percent, and their long term for repayment, an average length of 30 years.

(2) Private direct investment: This is supplied by enterprises, banks, or private individuals to foreign governments or enterprises mainly by way of investing in the establishment of factories in the recipient countries and purchasing stocks of enterprises and other assets. The characteristic of this kind of foreign capital is that the capital-importing country does not undertake the duty of repayment directly, but mainly allows foreign capital to secure profits from its operations.

(3) Exports credit loans: The credit loans provided by the governments of Western countries for the sake of encouraging capital and commodity exports are actually semiofficial credit loans. They usually provide credit loan guarantees through special institutions or provide direct loans. Such loans may be granted to export merchants, or they may be granted directly to import merchants. These kinds of loans have the following characteristics: (A) they usually stipulate the purchase of equipment from the granting country; (B) they are usually granted in the lending country's currency; (C) they are granted only up to 85 percent of the amount of the trade contract; and (D) their interest rate is fixed and subject to the constraints of international agreements, and generally speaking such interest rate is relatively low. At present, the following interest rates are in effect:

	Rich Countries	Medium Countries	Poor Countries
2 to 5 years	7.75%	7.25%	7.25%
5 Years & Above	8	7.75%	7.5%
Longest Term of Credit Loan	5-8 Years	8.5 Years	10 Years

(4) International currency market capital: This capital is made up of foreign exchange deposits absorbed by the private banks of various countries and the U.S. dollars deposited outside of the United States by American banks. These banks are engaged in the international credit loan business, and they individually or jointly supply loans to foreign countries.

The way currency market capital is extended is differentiated into direct lending by banks and the issuance of bonds. Bank loans are divided into long-term, medium-term and short-term loans. Interest rates for such loans differ with market fluctuations, so they are different in different periods, according to different currencies, and on the basis of different terms. The interest rate for hard currencies is lower, and that for soft currencies is higher. In bond issues, the issuer determines the total and the individual amounts of such bonds, which are sold in the currency market and bought by foreign banks or private individuals. The interest rates for such bonds are close to market loan interest rates, and they are usually fixed. Bank loans have increased at a faster rate in recent years; in 1978 they made up about 60 percent of the currency market capital, and the bonds made up about 40 percent.



In 1976, the structure and scale of international capital are roughly as follows:

Official Funds	U.S. \$15.465 billion	making up	17.10%
Private Direct Investment <sup>1</sup>	" 23.6 "		26.2 %
Export Credit Loan <sup>2</sup>	" 4.150 "		4.6 %
Currency Market Capital <sup>3</sup>	" 47.0 "		52.1 %
Of These, Bank Loans	" 19.0 "		21 %
Bonds	" 28.1 "		31.0 %
Total	" 90.215 "		100 %

In selecting foreign capital, we should adopt many channels. On the basis of our present relations with the Western countries, it is possible to secure some official funds, such as Japan's development loans, etc. But the amount we can secure will be limited. The source of direct investment from foreign countries is greater, but the initiative is not entirely in our hands. The most secure and most assured, with also more favorable conditions at present, are export credit loans, which should be the key in our use of foreign capital. The interest rate of currency market capital is relatively high but, on the basis of relevant investigation and study, this can also be appropriately used; the constraint of bond issuance is minor and the interest rate in question is fixed, so we should really strive to secure its use.

## II. We Must Adopt More Advantageous Ways To Use Foreign Capital According to Specific Conditions

There are basically three ways for us to use foreign capital:

(1) Capital in the form of credit loans, including the use of deposits by foreigners in our foreign exchange banks, export credit loans, medium-term, long-term, and short-term credit loans in the international currency market, favored loans of foreign governments or international organizations, as well as issuance and sale of bonds on the international market, and certain compensatory trade. (2) Credit loans in the form of commodities, including the processing of imported materials, assembly of imported parts, and certain compensatory trade. (3) Direct foreign investment, including joint management and independent management by foreign countries.

<sup>1</sup> Directed investment of developed capitalist countries in developing countries, plus net amount of direct investment between such developed capitalist countries themselves.

<sup>2</sup> Indicates only export credit loans to developing countries.

<sup>3</sup> The given year's net loans and net newly issued bonds.

<sup>4</sup> Not including loans supplied by the Soviet Union and East Europe to other countries.

There is a common characteristic involved in this regard no matter what forms are in question, and this is that, through the ownership of such capital, foreign creditors get the chance to share the new values we create by using the capital in the realm of our production. Because the different ways of use make a difference in the degree in which such new values can be shared, there therefore is also a difference as to how much resultant benefit there would be for the other side.

In the aforesaid case of capital in the form of credit loans, our use of foreign capital can be more independent and flexible. The interest on such foreign capital is fixed in a definite range, and there is usually a general international level to follow. After such interest payments are set aside, too, the gains from the use of the foreign capital become entirely our own, so that this makes our own gains greater. Its defect is that, in this case, the production and exportation of products must be handled entirely by ourselves, and we are not sure in advance how this foreign debt is going to be repaid. This method is generally suitable for adoption under the condition that the production and sale of products can be solved by ourselves.

In the case of processing imported materials and assembling imported parts as credit loans in the form of commodities, their procedures are simple, they are good for making use of our idle equipment and labor force, and the sale of resultant products is assured. But by this method, processing fees are fixed in a definite range, most of the gains created by improvements in production become those of the owners of the foreign capital, and the economic gains on our side are hence not very great. Sales channels are forever closed to our side as the user of foreign capital. This way is generally suited to the production of temporary, piecemeal, minor commodities. In all cases where regular, large batches of commodities are involved and we can handle our own sales, it is best to adopt the system of processing imported materials and exporting the products ourselves, and our reward system for earning of foreign exchange should encourage the processing of imported materials.

Compensatory trade has certain merits as a way of processing imported materials and getting loans, such as the guaranteed sale of products, interest on foreign capital being in a definite range, independence in enterprise management, etc. However, the procedures for this method are complicated and detailed, the sale price of products and the revenue of the enterprise are subject to greater influence from changes in the future market, and hence the risks are also greater. This way is generally not suitable for adoption in a situation where we cannot solve the sale of the products ourselves. In the case of traditional commodities and commodities enjoying smooth sales, there is generally no need for compensatory trade. If importation of foreign capital is needed because of a lack of capital, it is still better to adopt the method of securing loans.

In the case of joint management in the aforesaid form of foreign direct investment, both sides are responsible for running the enterprise in common and sharing its gains and losses in common, and for taking the risks in the production and sale of the products in common as well, but the sense of responsibility on the part of foreign capital would be stronger, and hence this is good for importing advanced technology and advanced management methods. Its defects are that the profits for foreign capital are enhanced along with the development of production, the period for collection of such profits is lengthy, and the portion of the economic gains being drained away is far greater. This is even more true in the case of independent management by foreign capital. This way is generally suitable only in a situation where we cannot do anything about the techniques for producing and selling the products ourselves. When this way is adopted, we must aim at importing relevant technology; if the goal is merely to solve the question of capital, it would be more advantageous to adopt the loan method. In the main, Japan acquires foreign capital by taking out loans, while Singapore's main way of using foreign capital is to absorb foreign investments; both have made a go of their economies. But Singapore's payment of interest on and profits from foreign capital is far greater, so its actual income is far less than that of Japan.

When we use foreign capital, various ways can be adopted, but we should for the most part take our loans. We must insist on the spirit of hard struggle; we cannot choose a way to use foreign capital from the standpoint of enjoying convenience or saving ourselves some trouble.

### III. We Must Endeavor To Improve the Results of Using Foreign Capital

Among the results of the use of foreign capital, there are results for the national economy (or overall results) and results for the individual enterprises. Results for the national economy are reflected in the improvement in the results of social capital, and results for the individual enterprises are reflected in the level of profits of those enterprises.

The improvement in the results for the national economy is significantly related to the investment orientation of foreign capital. For instance, if used in the field of electric power, of communications, it can serve to activate a series of other industrial developments; if it is used for a hotel or a hospital, then the role it plays is localized. Hence, generally speaking, foreign capital should mainly be used for productive investments, and not invested excessively in consumptive departments. But we cannot make such investment orientation absolute, because the high-speed development of the national economy depends on a comprehensive balance of various departments for its realization; when certain departments have a shortage, they become a key affecting the overall development of the economy, and if foreign capital is invested in these departments, it will then help reap the greatest overall results. Consequently, the investment orientation of foreign capital should be flexible according to the needs of the time.

Economic results for the individual enterprises are the foundation of the results for the national economy; under most conditions, the two are usually consistent with each other. When the investment results of an enterprise using foreign capital are good, the whole country's capital coefficient is liable to decrease and the economy is likely to develop at a higher speed. The work of accurately appraising and calculating the results of the use of foreign capital is relatively complicated but very necessary. We should continue to make efforts to strengthen our study, formulate pertinent criteria, and gradually improve it. Some indicators that can be calculated should be specifically prescribed. In the case of an enterprise using foreign capital to produce export products, for instance, its foreign exchange profit rate must exceed the interest rate, and its exchange rate should not be lower than the average exchange rate for all the country's export commodities, etc.

In order to give scope to the role of foreign capital, we must create various conditions, such as complementary capital, balanced resource allocations, etc., so that after foreign capital is invested, pertinent production capacity can quickly take shape.

#### IV. Master Well a Rational Limit of Indebtedness

Using a bit more foreign capital can really accelerate the development of the economy, but the amount of foreign capital to be used cannot be determined at random. There is a rational limit which exists objectively in this regard, and it is also subject to certain external limitations. This limit comes from both the domestic and external considerations.

The domestic factor is mainly the ability of the indebted country to absorb, use, digest and repay such foreign capital. If too much foreign capital is absorbed in a given period, ill consequences are likely to result. Under the conditions of a capitalist market economy, inflation and a rise in prices, or a serious unfavorable balance between international revenue and expenditure, are likely to occur; sometimes, both phenomena can occur at the same time. Such phenomena have occurred in almost all countries which use fairly large amounts of foreign capital. This kind of inflation is different from the consumption type of inflation; it does not immediately reduce the rate of accumulation, and the economy can also continue to grow, but this cannot keep up for very long, and class contradictions will intensify. Under our system, because of strict import controls and price controls, consequences of the capitalist kind are unlikely to occur, but troubles are likely to show up in another form, such as an inability to achieve a balance in resource allocations, stagnation in capital circulation, or inability to bring into being pertinent productive capability. Under such circumstances, the effect of foreign capital becomes adverse, and it is liable to turn into a burden. The limit of the domestic factor cannot be easily indicated by a figure; situations also vary from country to country. Generally speaking, it must be controlled within the limit where the abovementioned serious troubles are unlikely to occur. As for enterprises, along with the

expansion of equipment and increase in the possession of capital, their profit rate may decrease and their investment results may be reduced; hence, they should choose the most appropriate scale of investment. An enterprise may derive the most rational scale for the use of foreign capital through calculations made on the basis of the mutual effects of its own investment and profit rate.

The external factor is the greatest limit for the granting of loans to a country proposed by international creditors on considerations of capital security. This limit is by no means uniform in the international arena; there are no fewer than five or six publicly proposed kinds. The more widely accepted is the limit of 70 percent foreign debt service rate [1120 0280 0290 2137 0024 0764] (DSR) proposed by the World Bank; that is, the amount of principal returned and interest paid by a country in a given financial year on a medium-term or long-term debt of more than 1 year should be (no more than) 70 percent of the revenues it earns from commodity and service exports in that year. Any amount in excess of this limit would be regarded as overburdening the country's indebtedness, pointing to the danger of eventual default; hence, a creditor country would often decline to make the loans. The foreign debts of most countries and areas in the international arena today fall within this limit. In 1976, of the 57 principal indebted countries and areas among the developing countries, 50 were within this limit, and only 7 exceeded it. These latter included Brazil, Mexico, Bolivia, Peru, Egypt, and Pakistan. Countries in East Europe and the Soviet Union nearly all exceeded this limit. Those countries which exceed this limit are usually the ones with abundant resources, a great potential in exports, abundant deposits of foreign exchange, or faster economic development. From this, we can see that, for most countries, a DSR of 70 percent does play a role, but certain countries with a greater ability to use foreign capital may exceed this limit.

Our rational limit for using foreign capital should be considered from the standpoint of our domestic ability and external conditions. From the standpoint of domestic ability, our present ability to use foreign capital is not necessarily very great; in recent years, the capital required for every increase of 1 yuan in the national revenue has been twice as high as in the period of the First Five-Year Plan. The lack of proportionate development in many departments is still not quite readjusted. Our export capability is also not very great; there are only two commodities whose large-scale exports exceed U.S. \$500 million, and of these, petroleum and its products are unlikely to increase in the next few years. Therefore, it is realistic in the short run to control the limit of our use of foreign capital within this repayment rate of 70 percent. We should actively yet prudently use foreign capital within this limit and carry out penetrating and meticulous work on the four links of "borrowing, using, making profits, and repaying," in order to do our best to realize the goal of using foreign capital to speed up our economic development.



## NATIONAL ECONOMIC POLICY

### UPHOLD PRINCIPLE OF PRICING ACCORDING TO VALUE

Tianjin TIANJIN RIBAO in Chinese 10 Jun 80 p 1

[Article by Peng Zhenyuan [1756 6297 1254] and Li Jing [2621 4842]:  
"Correctly Understand and Consistently Apply the Principle of Setting Price  
According to Value"]

[Text] Resolutely upholding the principle of setting price according to value in pricing is the concrete and essential purpose of price regulation. Everyone knows that the price of goods is the monetary manifestation of their value. It is an essential principle of the Marxist theory of labor value that the price of a given type of goods depends on the amount of socially necessary labor expended, and not on the individual labor expended. However, there is a prior condition to this, which is that we assume that the quality of the same type of goods is the same. Because the amount of time spent in socially necessary labor generally varies for goods of differing amounts and quality, it is generally said that, under similar conditions, the labor expended to produce high-quality goods will be greater than the labor expended to produce inferior goods. Therefore, the general prices of goods of different quality will also necessarily differ. Take cotton as an example. Because with good cotton it is necessary separately to pick it, lay it out to dry in the sun, store it, and gin it, the labor expended is greater than for lesser cottons. Therefore, the price of good cotton is necessarily higher than that for lesser cotton. It can be seen from this that goods of differing quality will all have different prices, and therefore the objective basis is price according to quality and, to use monetary terms to reflect the difference, setting prices that differ with the quality of goods.

Naturally there is another situation where, under the same circumstances, production of high-quality goods does not consume more labor than production of inferior quality goods, and in the extreme converse case may require even less labor. If we set prices according to quality, then differences will emerge between price and value, so that the price of high-quality goods will be higher than their value, while the price of inferior quality goods will be lower than their value. This type of difference is produced by the relationship of supply and demand. This is not contrary to the

demands of value regulation, but reflects the price adjustments in value regulation. Therefore, of course, regardless of circumstances, based on goods of differing quality having different prices, the implementation of high prices for high quality and lower prices for inferior quality is entirely compatible with the demands of value regulation.

Setting prices according to quality is beneficial to encouraging progress and encouraging those who have fallen behind, while promoting the development of socialist production. If an enterprise can produce goods of higher quality while using the same human and natural means, then it is the same as creating greater value. Such a firm will not only be able to compensate for the costs expended but also will obtain greater profit. Conversely, if the value created is small, the profit obtained is also small, even to the point of producing a loss. In order to make enterprises become concerned about raising the quality of goods and increasing the number of varieties, from the standpoint of economic benefit, it is necessary to earnestly employ the economic balancing pole of prices varying according to quality.

Setting prices according to quality helps to adjust supply and demand in the marketplace and to coordinate the balance between production and consumption. By rationally using prices that vary with quality, people can, based on the amount of their income, choose goods of differing levels suitable to their own needs and, as a result, better distribute society's buying power. This not only benefits the free distribution of goods among consumers and the full utilization of things, but can also satisfy the needs of differing levels of consumption. Otherwise, it is possible that the supply of some goods will not match demand, giving rise to inventories of unmarketable goods.

Setting prices according to quality also benefits the stabilization of market prices. When considering whether or not prices are stable, people always judge them in relation to changes in the quality of the same goods. Comrade Chen Yun [7115 0061] pointed out at the Eighth Congress of the Chinese Communist Party: "We should recognize that the declining quality of goods is the greatest inflator of prices. For example, if an electric light bulb that formerly could be used for 1 year can now be used for only 1 month because of declining quality, then in reality its price has been inflated threefold." Therefore, today when the quality of several consumer goods is declining, resolutely and thoroughly carrying out the general principle of setting prices according to quality benefits the stabilization of market prices and the safeguarding and expanding of the consumers' interests.

In the past, and especially before 1958, our enterprises took price regulations with comparative seriousness and stressed making use of the balancing pole of prices varying according to quality. Afterward, as a result of the agitation caused by the extreme leftist line of Lin Biao and the "gang of four," people treated price rise regulations with indifference and did not take seriously the general principle of setting prices according to quality. That sort of thing inevitably harms the development of production,



the circulation of goods, and management; its effect can only be to damage the interests of the masses of consumers. Since the "gang of four" was smashed, there have been very great changes in conditions; nevertheless, opposition to the general principle of setting prices according to quality has appeared in practical economic life.

First, prices for some goods of different grades and types are not rational. For example, in the marketplace, stocks of high-intensity light bulbs accumulate, while light bulbs of low intensity are sold out. The most important feature of this, aside from the problem of management, is the fact that the price difference between small and large light bulbs is not rational, and as a result the production of large bulbs makes a profit, while the production of smaller bulbs suffers a loss. In order to encourage enterprises to produce more goods suitable for sale, it is necessary to rationally adjust the differing prices by grades and type among goods and earnestly carry out the general principle of setting prices according to quality.

Second, some goods undergo manmade degradation or upgrading that produce incompatible prices and qualities. For example, in the trade in live pigs in separate areas, the phenomenon of excessively degraded quality and price has appeared. Sometimes the grades of some goods have been raised, but over the long term, prices cannot make corresponding upward adjustments. These conditions, called disguised degradation of prices, are not beneficial to the normal development of production or to an increase in the quality of goods. On the contrary, some units have wringed out enlarged profits in order to conceal deficits brought on by bad management; in other cases, in order to give out large sums in bonuses, they change the trademarks or brand names of some goods, or they change the manner of trim or color, or they change the style or packaging. Meanwhile, the quality does not change at all but, conversely, the price rises a lot. These conditions are called disguised inflation of prices. In order to preserve the reputation of socialist enterprises for trustworthiness, and to guard the individual interests of the broad masses, these kinds of conditions must resolutely be corrected.

Third, some demand high prices for high-quality goods but do not lower prices for inferior goods. For example, the original price of a certain item reflected the regulation for the best type; afterward, the quality of those goods declined, but the price has not yet made a corresponding downward adjustment. Now, under strengthened administration, the quality of the item has again been raised but has not yet exceeded the original quality; nonetheless, based upon this rise, demands are made to increase the price. Obviously this is unreasonable. Setting price according to quality includes not only high prices for high quality but also lower prices for inferior goods. In order to correctly use the standard of prices varying with quality, we cannot implement high prices for high quality and not implement lower prices for inferior goods. Based on changes in the quality of products, we must carry out the general principle of setting prices according to quality, making full adjustments for both increases and decreases in quality.

In summary, in order to handle matters thoroughly according to objective economic law and completely bring into play the balance pole of prices differing according to quality, ideally we must on the one hand correctly and completely explain the general principle of setting prices according to quality, and on the other hand we must seriously and completely carry out this principle in practice. Only when these steps are taken will we be able to gain the expected good results.

9504

CS01 4006

## ECONOMIC PLANNING

### ECONOMIC JOURNAL SUMS UP JIANGSU EXPERIENCE

HK230817 Beijing JINGJI GUANLI in Chinese No 7, 15 Jul 80 pp 4-9

[Article by Wang Bingzhi [3076 0393 4258], vice governor of Jiangsu Province: "Start from Practice, Investigate the New Situation and Solve New Problems"]

[Text] Since the 3d Plenary Session of the 11th Party Central Committee, vast numbers of cadres and workers on the Jiangsu industrial and communication fronts, proceeding from actual conditions, have emancipated their minds, paid attention to investigating the new situation and solved new problems in accordance with the party's political and ideological lines.

Over the past 2 years, attention was concentrated on studying and solving the following three problems in many places and various kinds of industrial departments:

- How to develop the regulation of the market;
- How to support and promote the collective enterprises in cities and towns as well as the rural commune-run enterprises; and
- How to carry out and effectively shake-up the existing enterprises.

Practice has proved that only by solving these three problems--in addition to enlarging the autonomous power of enterprises--will communications and industrial work be enlivened, and their development accelerated, opening up great prospects for increasing production and practicing economy.

#### 1. On Promoting Regulation of the Market

Regulation of the market was already in existence before last year. However, we did not take the matter seriously then or even attempt to impose restrictions on its development by administrative means. Inspired by the spirit of the 3d Plenary Session of the 11th Party Central Committee, the masses of cadres and workers on the economic front emancipated their minds, getting rid of ossification and semiossification. Thus, regulation of the market has developed in an unprecedented manner.

At the beginning of last year, there were a considerable number of enterprises waiting for projects. Throughout the province, 70 percent of the enterprises in the machinery trade were operating below capacity. Owing to the erroneous estimate made of the situation concerning the relations between supply and demand, there was on one hand a shortage of commodities on the market and on the other there was overstocking of industrial products. The stockpiles of light industrial products alone amounted to as much as 200 million yuan. As for chemical fiber products, stockpiling of these goods at one stage amounted to as much as 400 million yuan, but afterwards these products were out of stock which created a severe market shortage. Owing to overstocking of products, thereby tying down a large sum of circulating funds, many enterprises failed to maintain their production levels and could not even afford to pay out wages, thus directly affecting the economic interests of the enterprises and the workers. Contradictions centered around the links of circulation. Under such circumstances, a great many enterprises, trades and professions had no alternative but to find their own markets, canvass for business orders, promote the sale of goods and purchase raw materials. Therefore, it can be said that in our province we were compelled to promote regulation of the market by proceeding from regulating commodity circulation.

For a year or so, as far as the growth of regulation of the market is concerned, we have undergone the process from regulation of circulation to regulation of production and consumption; the process of regaining initiative from a passive position; the process from a state of being scattered and spontaneous to a state of being directed under leadership and in an organized way and the process of coordination among departments of industry, commerce, material, finance and banking.

**Regulating Circulation.** Regulation of the market in our province started with promoting the sale of products which had been stockpiled and purchasing raw materials which were badly needed for industrial production. But now it has succeeded in closely coordinating industry and commerce, reducing circulation links, cutting costs and enlivening the market.

**Regulating Production.** Production should be arranged in accordance with social needs and in a more flexible way; varieties of articles should be enriched and quality improved; the sale of products which sell poorly should be promoted and enterprises which formerly waited for projects should operate at maximum capacity. Thus enterprises are bound to develop and production will be arranged in a flexible way. Take the machine building industry in Wuxi County for example. Under circumstances whereby two-thirds of the enterprises were operating below capacity, they changed direction and engaged in the production of light and textile machinery, building machinery, metallurgical machinery, petroleum industry fittings and home electrical appliances. As a result, more than 500 machine building plants throughout the county were basically put into high gear and their output value increased by 28.8 percent over the previous year.

Regulating Consumption. New changes took place in the urban and rural markets last year. Specially after the rural economic policies were put into practice, we reaped a bumper harvest in agricultural production and the peasants' income and purchasing power greatly increased. There is an even more pressing need for products of medium and high-grade and famous brands. In the case of basic necessities of life, people formerly gave priority to food instead of clothing, transportation and housing. But now housing has been put in first place whereas food comes after transportation and clothing. In regulating the market, many industrial enterprises are geared to the needs of the market, especially the rural market. They not only increased products which are badly needed but made every effort to trial produce new products and promote their sale. In addition, they expanded the production of medium- or high-grade articles as well as low-grade articles which are competitive in price and quality. Last year, more than 720 varieties and over 19,000 types of new articles were on sale throughout the province. Such products as electronic watches, multiple-function sewing machines, small-wheeled bicycles, miniature electric irons, cosmetics and food made with pearl powder and synthetic fabrics inlaid with golden and silver thread appeared on the market in batches. Regulation of the market has stimulated consumption and the increased level of consumption is bound to give impetus to industrial production.

Practice over the year has indicated that in the case of promoting regulation of the market, we have started to overcome limitations in the following six respects.

[HK230819] 1. We have overcome the limitation whereby the means of production could not enter the market. Last year, a considerable proportion of products in our provincial machine building, metallurgical and chemical industrial trades in which emphasis was put on producing the means of production were subjected to market regulation. As far as the metallurgical industry in our province was concerned, products regulated by the market accounted for more than 25 percent; whereas in the chemical industry, according to statistics compiled in 11 cities, increased output value by market regulation amounted to as much as 500 million yuan, making up over 30 percent of the total output value.

2. We have overcome the limitation whereby no industrial departments were allowed to market their own products. By setting up showcases for industrial products, establishing close contact with related shops, promoting volume sales and gaining orders, and setting up retail departments marketing their own products, the industrial departments sold part of their own products, directly heeding the opinions and comments of consumers and commercial departments. Thus they could get directly in touch with the consumers or users. Generally speaking, in dealing with the matter of industrial enterprises marketing their own products, everything was arranged in line with the consultation between industrial and



commercial departments concerned. The scope for marketing of one's own products was confined to products not included in planning; products in excess of the production quota or retained after the production quota was fulfilled; products not purchased by the commercial departments or produced without relying on the supply of raw materials from the state; and trial-produced products which were not put into series production. However, products included within the state purchase and marketing monopoly or rationed products only purchasable by coupons should be strictly controlled in accordance with the relevant state rules and regulations.

3. We have overcome the limitations of different regions. Apart from insuring the materials and commodities which are allocated and purchased by the state in a unified way, many enterprises have overcome limitations in administrative areas. They sell their products not only within the province but also throughout the country; the products of the commune-run enterprises are not confined to local markets. Instead, they are marketed all over the country. Simultaneously, any enterprises from different regions are welcome to promote the sales of their products and the local market is no longer monopolized by the local enterprises. Take "hongmei brand" plastic cameras produced by Changzhou City for example. As they sold poorly for a long time, the factory suffered heavy losses for 3 years running and was on the brink of bankruptcy. Last year, the factory tried every means to promote sales in various parts of the country and entrusted the Wangfujing Department Store in Beijing as its commission agent. Since then, the situation has turned for the better. Last year, though the output was six times that of the previous year, it failed to meet the needs of the market.

4. We have overcome the limitations of different trades. The machine building, metallurgical and chemical industries are geared to the needs of the light industrial market and aim at serving the expansion of the light and textile industries. Products of our provincial machine building industry which suit the needs of the market--such as film projectors, cameras, refrigerators, air conditioners and electric fans--have increased by a wide margin.

5. We have overcome the limitations whereby military industrial enterprises are now assigned to manufacture products for civilian use. To bring the war production of our province into full play and implement the policy of "Integrating the Army and the People, in Peace and War Times," a great number of military industrial enterprises have increased production of products for civilian use. In the course of promoting production for civilian use, priority should be given to developing products whose variety and technology are similar to military supplies--such as electronic products, domestic electrical appliances and medical apparatus and instruments which are badly needed in the market. Last year, the proportion of products manufactured for civil use in the military industrial enterprises of our province rose from 27 percent in 1978 to more than 40 percent.

6. We have overcome the limitations whereby socialist enterprises cannot compete with one another. They are encouraged to compete with each other in raising quality, lowering consumption, providing good service and achieving better economic results. In so doing, impetus is given to the socialist emulation drive--emulating, learning from, catching up with, helping and in turn surpassing each other. Through competition, many products sell well and enjoy high prestige. This has resulted in a change from the state of monopoly that used to exist. Some enterprises realized that even goods of a well-known brand should try hard to find their own market. As far as the Suzhou region is concerned, in the course of competition, attention is given to obtaining accurate figures about the market, achieving a fast turnover, improving quality and quantity, providing good service and making the price more competitive. Naturally, competition will lead to price fluctuation. However, the actual situation is that most of the prices are down and only a few are up. According to investigations and statistics of the prices of 807 items produced in the Suzhou area, most of the prices floated downward and only 23 items of goods which are badly needed were 4.5 percent higher than the retail price.

With the development of market regulation, industrial departments and enterprises began to pay close attention to the strengthening of managerial skills. While relying on cooperation between commercial departments run by the state and supply and marketing cooperatives, we have gradually established industrial departments in the cities and towns and three-grade industrial supply and marketing managerial departments in the districts, counties and communes (where there are many industries). They are in charge of purchasing raw and semifinished materials, marketing the manufactured goods, receiving production task and investigating market conditions. They have played an important part in the market regulations. [HK230821] At present, managerial structures corresponding to market regulation have been set up from the higher levels to the grassroots in several localities and trades throughout the province. At the same time, people have raised their comprehension of managerial skills and attached great importance to the building of the ranks of supply and marketing personnel. The leadership at all levels fully affirmed the enthusiasm for work and the spirit of hard struggle by the supply and marketing personnel, praising them for "traversing thousands of mountains and rivers, resorting to all ways and means and enduring all kinds of difficulties and hardships." The leadership shows great concern for them politically, supports them in their work, takes care of them in their daily life and fully mobilizes their enthusiasm for socialism. In some places, training classes were run for them in order to raise their vocational levels. In addition, their families are properly taken care of to enable them to work without anxiety about home life. In other places, the industrial supply and marketing personnel of the communes and brigades were organized with veterans helping the newcomers and the practice of "purchasing, marketing and communications being linked in sequence" was exercised.



It is natural that different views on market regulation emerge during the process of developing market regulations. Judging from practice over the past year, our market regulation and that which occurs in capitalist society are entirely different in nature.

Whether in production or circulation, market regulation based on socialist public ownership is carried out under the situation of the absolute predominance of ownership by the whole people and collective ownership. The products of the enterprises are, to a varying degree, related to state plans directly or indirectly, and restricted by the latter. The above-mentioned market regulation is not inevitably related to capitalism. It is socialist in nature and that is unquestionable.

Planned regulation and market regulation are closely related, mutually complementary and overlapping. First of all, state plans should be fulfilled but it is impossible and unnecessary for state plans to monopolize everything. Once Lenin pointed out, "So far as we are concerned, a complete and genuine plan is nothing but a 'bureaucratic pipedream.' We must not seek such a pipedream." Last year, after being converted into output value, the production plan drawn up by the state, province, and provincial bureaus accounted for 60 percent of the gross industrial output value of the whole province and the products arranged by the districts, counties, communes and enterprises accounted for 40 percent. Even the shortage of products, raw and semifinished materials, fuel and power which are within the state plans are to be made up by market regulation. So market regulation is an indispensable supplement to state plans.

Market regulation as practiced by us, is carried out in a guided and organized way and does not develop in a blind free-for-all as it does under capitalism. The guidance of state planning over market regulation depends not only on the guidance of plans but mainly on the implementation of the party's lines and policies, on the planned arrangement and support of the various departments concerned in such categories as materials and technology as well as supply and marketing, and depends on the application and elaboration of economic levers--such as taxation, price credits and investment--on the overall arrangement of long-term planning and coordination between specialized departments and on the guidance of economic laws and economic judicial organs.

The social wealth accumulated as a result of market regulation will increase accumulation for the state, income for the enterprises and personal income for the individuals according to the principle of "to each according to his work." It will never be converted to private capital.

Proceeding from social demands, the expansion of market regulation has increased market commodities and enlivened the market rather than creating chaos. It is supplementary and not redundant to state plans, and conducive to the transition to socialist mass production.

In short, market regulation will continue to develop. We should clarify our thinking, be well informed about the quotations on the market and well versed in our professions. All channels should be unimpeded and barriers opened up. Only when the enterprises are given greater powers of self-management can market regulation be carried out in a better way and the economy run with greater flexibility. Contradictions that have emerged in developing market regulation need further investigation and study so as to "foster merits and overcome demerits."

## II. Supporting and Developing Collectively-Owned Enterprises

In cities and towns and rural commune-run enterprises and in the economic construction of our province, collectively-owned enterprises have become a productive force which cannot be neglected. In 1978, there were more than 22,000 collectively-owned industrial enterprises (including those run by communes) and nearly 40,000 brigade-run industrial enterprises throughout the province. More than 2.29 million people were employed in the collectively-owned enterprises in cities and towns and a labor force of 3.02 million was assigned to work in the industrial enterprises run by the communes and brigades. The output value and profits of the collectively-owned industrial enterprises in cities and towns comprised 33 percent and 38 percent respectively of the provincial gross industrial output value and the total volume of industrial profits. The proportion of the income of enterprises run by communes and brigades accounted for 42 percent of the three-grade rural economy throughout the province. Therefore, the enterprises run by the communes and brigades have become an important component part of the rural economy and a mainstay of agricultural production. Over the past few years, about half of the people who had been awaiting jobs have been employed in collectively-owned enterprises. As an important part of the socialist economy, the collectively-owned enterprises have played a great role in developing industrial production, supporting agricultural production, creating a boom on the domestic market, increasing exports and accumulating construction funds. In addition, they have played an important part in opening up great prospects for employment, raising the living standard of the peasants and building a new socialist countryside.

[HK230823] Most of the collectively-owned enterprises in the cities and towns and those run by the communes and brigades in the province are small in scale. Most of their products are not listed within the state planning. When we began to readjust our economy last year, some comrades thought that the enterprises run by the communes and brigades "had held ground amid chaos" and "would be eliminated through selection after the restoration of order." "While big factories are to be readjusted, small ones should close down." Many leading cadres worried and were afraid that collectively-owned enterprises would suffer setbacks amid readjustment. However, the facts were contrary to their expectations. In the first half of last year, the production of the majority of collective-owned

enterprises developed at a great speed and the industries run by the communes and brigades expanded at an even greater speed. Last year, in Suzhou and Nantong prefectures where collectively-owned enterprises held a predominant position, the growth rate of the gross industrial output value was 30 percent to 37 percent, far in excess of the provincial average. Last year, in the campaign for "increasing production and practicing economy," the collectively-owned enterprises fully manifested their superiority and characteristics--such as their relative independence, considerable flexibility, comparatively strong adaptability and relatively great initiative. The collectively-owned enterprises can readily readjust the direction of their products when the goods become outmoded and are no longer needed by society. In addition, they can practice the method of setting production quotas according to market demands and promoting production along with marketing. The development of collectively-owned enterprises relies on market regulation and is less dependent on state planning. Moreover, collectively-owned enterprises need not await orders from higher levels, so they are more flexible and their growth rate is much faster. In the meantime, they are economic units which have their own business accounting and assume sole responsibility for their profits and losses. All the leadership and workers show great concern for their own economic interests and the results of management. Enjoying greater powers of self-management, they can carefully select the items of their management, properly utilize manpower and materials and rationally implement the principle of "to each according to his work." All this has proved that collectively-owned enterprises have greater vitality. They have not been "eliminated through selection after the restoration of order," but instead are developing to new heights. The collective enterprises which are small in size, scattered and numerous are best suited to developing industrial productive power in our province. We should fully utilize and mobilize this superiority, and thus further promote economic production.

Last year, the Jiangsu Provincial Party Committee held several meetings and special study sessions on the issues of how to support and develop collective enterprises and formulated a guideline "suit measures to local conditions, develop the big, medium and small enterprises simultaneously with the stress on the small and medium ones, coexist for a long time with the enterprises owned by the whole people, compete with one another and mutually develop to a higher level." In implementing this line, various localities and departments have adopted positive measures and combined the development and improvement of the industries run by the communes and brigades with the readjustment and consolidation of the national economy. In line with the spirit of overall consideration and planning, all professions and trades continued to support the collectively-owned enterprises in such respects as equipment funds, technology, raw and semifinished materials and power, thus enabling them to further expand. The party committee and government at all levels have attached great importance to grasping this work and strengthened the leadership

over it. In the light of different conditions, they adopted many forms of management to give aid to and develop the collectively-owned enterprises such as the sole running of enterprises, big factories running small ones, jointly-run enterprises by factories, integrated enterprises run by the counties, communes and brigades and compensatory trade with foreign countries. Last year, there were some 110 integrated enterprises of all kinds. Of these, 60 enterprises were run jointly by the counties and communes. In Wuxi, 99 collective factories were set up last year, providing employment for 50,000 people, thus expanding production.

Last year, having a clear idea of the guideline mentioned above, we paid closer attention to giving aid to and developing the collective enterprises and those run by the communes and brigades in line with the policy of readjustment. Due to the sabotage of the ultraleft line pursued by Lin Biao and the "gang of four" and the shortcomings in our system, quite a few rules and regulations are unfair to the collective enterprises. Some localities continued to adopt the old policy of "using, restricting, and remolding" as we did in the past to the private enterprises. Furthermore, they practiced the policy of "equalitarianism, indiscriminate requisition and drawing out of loans" with regard to the funds and wealth of the collective enterprises. This made some of the collective enterprises unable to make good use of their own productive capacity and bring into full play their enthusiasm for production. Under the condition that the state has not yet formulated any policy on this matter and on the basis of investigations and studies made by the special groups sent by the provincial party committee and after careful consideration, readjustment was made with regard to the assignment of production tasks for the collectively-owned enterprises, the supply of materials, the marketing of commodities, the allocation and use of the prices and profits, the wages and welfare as well as labor insurance of the staff and workers. Besides, we still continue to stress that agricultural and sideline product processing industries should be run by the communes and brigades. In the campaign for "increasing production and practicing economy," so long as the quality of the products of the agricultural and sideline processing industries is up to standard and in accordance with the principle of being economical and rational, we should assign them production tasks without any discrimination according to the principle of overall consideration. Take the cocoon-raising areas for instance. We worked out clear regulations determining the ratio for purchase and retention of cocoons. [HK230825] This is conducive to utilizing the idle portions of small silk factories run by the counties. We protect and expand the collective enterprises by making policy measures.

Conditions should be created to improve the poor links of the collective enterprises and great efforts should be made to upgrade the managerial skills of enterprises. The pressing problems of the collective enterprises, particularly of industries run by the communes and brigades, are the shortage of managerial personnel and poor management. In supporting



and developing collectively-owned enterprises, while coordinating with various localities, the departments responsible for the work earnestly took a firm grasp of the all-around training for the leading members, thus paving the way for strengthening quality control, labor force control and financial management of the enterprises. Since the various localities attached importance to the strengthening of enterprise management, the managerial skills of the collective enterprises have been raised greatly. This is an important reason why the collective enterprises in our province can hold their ground firmly in the face of competition with big industries.

Forces from all sides and fields should be mobilized to support and develop the collectively-owned enterprises. Last year, in various meetings and relevant documents, the party committee stressed that all professions and trades should concentrate on supporting and developing the collectively-owned enterprises. In order to raise the planning sense of industries run by the counties and communes, planning commissions at all levels should help the commune-run industrial departments responsible for the work to draw up planning for their industrial growth and supply specialized equipment to the newly built or enlarged enterprises. The industries in cities and towns should help train technical personnel and supply technical materials and help the newly built enterprises go into operation as soon as possible with the method of "helping them mount their horses and seeing them off on their journey." In 1978 and 1979, we drew 75 million yuan from the reserve funds, allotted the sum to the economically poor districts and regions to develop industries run by the communes and brigades and gained good results. According to market demands, the commercial departments helped the collective enterprises readjust the direction of their products and fulfill the production task. In addition, they purchased and promoted the products of the collective enterprises. Last year, the departments of commerce and their affiliated organizations throughout the province purchased as much as 470 million yuan of the goods manufactured by the communes and brigades. According to statistics of Suzhou Prefecture, in the case of production tasks fulfilled by the commune- and brigade-run enterprises, about one-sixth of the raw materials were supplied by the commercial departments last year. By adopting the method of "the stage is set up by the commercial departments while the performance played by the enterprises is run by the communes and brigades," on numerous occasions we promoted or jointly sponsored industrial product exhibitions or trade fairs with several counties. To help the industries of the communes and brigades solve the problems of production, supply and marketing, the material departments led the industrial departments of the communes and brigades in joining the regional administrative and interprovincial activities of material inter-course, thus enabling the industries of the communes and brigades to play a role in the state's material circulation field. In addition, the material departments tried their utmost to supply raw and semifinished materials. In addition, the bank granted them low interest loans and the

financial and taxation departments carried out a policy of low tax collecting with reward to the managerial departments of the three-grade industries of the communes and brigades. Supported by all professions and trades, the growth of the collectively-owned enterprises took a big stride forward. The proportion of the output value and profits of the industrial and collective enterprises reached 40 percent of the growth output value and the total amount of industrial profits of the province respectively. The growth rate of the industries run by the communes and brigades was even faster. They have made new contributions to developing agricultural production, supporting state construction and making the socialist countryside prosperous and rich.

### III. Do a Better Job of Consolidating the Enterprises and Take Big Strides Toward Chinese-Style Modernized Enterprises

On the basis of repuning and repudiating Lin Biao and the "gang of four" and bringing order out of chaos in the past few years, by combining with the campaign of "in industry, learn from Daqing" and "increase production and practice economy," we have gradually straightened things out in all work done by industry and communications enterprises. Recovery and consolidation has been basically completed in most of the enterprises and production and operation have gradually been reorganized and put in order.

After the completion of recovery and consolidation, by proceeding from the present situation of the industry and communications enterprises throughout the province, we set new demands for constructive consolidation. Our general guiding ideology is that to fully mobilize their role as the "base area" of the existing enterprises in the four modernizations, the greatest possible efforts should be made and effective measures adopted to put the existing enterprises in order. By tapping potential of the consolidated enterprises and getting the best economic results from these enterprises, we should be able to work hard to explore the experience of running Chinese-style modernized enterprises.

We should make overall plans, offer guidance to different types of enterprises and gradually put the plans into effect. Last July, we produced an initial draft for consolidation and improvement of the industrial and communications enterprises during the period of readjustment. In the working conference of industry and communications throughout the province, and that of the provincial party committee, we successively held earnest discussions and made revisions. After approval, the draft was sent, in the name of the provincial government, to various localities to be put into effect. In accordance with the program of the province, suiting their own present conditions, all localities, cities and industrial departments responsible for the work laid down rules and regulations for implementation, put forward concrete demands for the targets to be fulfilled annually and set the time and standards for checking and acceptance.

[HK230827] In carrying out constructive consolidation, we proposed different demands for different types of enterprises and offered guidance accordingly. In the second half of last year, we made an overall analysis of about 6,300 enterprises at county level and above. The general situation was as follows: Enterprises of the first type numbered 832, comprising 13.1 percent; the second type numbered 4,794, or 75.6 percent; and the third type 713, or 11.3 percent. Enterprises of the first type have improved to varying degrees since the consolidation carried out last year. Of the second type, 500 enterprises have been raised to the level of those of the first type and 203 enterprises of the third type have been raised to the level of those of the second type. Other enterprises have also improved markedly. This year we will make separate demands for the consolidation and improvement of the three types of enterprises.

Enterprises should be consolidated in the practice of realizing the four modernizations. Under the new situation, at first we had no idea of how to consolidate the enterprises. Later, after investigation and summing up experiences in various localities, we came to the conclusion that the consolidation of enterprises under the new situation differed from that in the past in content, form and emphasis. It is not isolated, stagnant, politically motivated, or consolidation for consolidation's sake. Its point of departure and aim are improvement. So constructive consolidation should be carried out in the campaign to increase production and practice economy with the stress on production, in developing market regulation and giving greater powers of self-management to the enterprises on a trial basis. That is to say, constructive consolidation is carried out in line with the implementation of the policy of "readjustment, restructuring, consolidation and improvement" with readjustment as its core, and in conformity with the practice of realizing the four modernizations. Consolidation of this kind gives inner dynamic force to the consolidation of enterprises. Last year, 131 experimental enterprises which were given greater powers of self-management combined the experiment with consolidation and pushed the consolidation and improvement of enterprises to a new height. Great changes have taken place in the management of enterprises and the enterprises as a whole. Every staff member and worker in the enterprises shows concern for the management and takes part in the business accounting of their own enterprise. Practice has proved that to grant greater powers of self-management to the experimental enterprises is, in fact, to promote their consolidation and improvement of enterprises by economic means. In developing market regulation, many enterprises spared no efforts to improve business management and did a lot of work in producing fine quality, low price goods, upgrading the quality of service, continuously raised the competitiveness of their products and strove to achieve the best results.

Drawing up standards and setting models, in the program for the consolidation and improvement of the enterprises throughout the province, we clearly drew up 5 requirements for rectifying the enterprises during



the readjustment period and 10 concrete demands for improving the management of enterprises. In line with the province's program and after learning the 12 requirements for rectifying the management of enterprises from the First Ministry of Machine Building, various industrial and communications departments of the provincial industrial sectors worked out concrete demands and detailed rules and regulations for carrying out the consolidation of enterprises according to the characteristics of the industrial departments and enterprises concerned. Provincial textile, chemical engineering, power, metallurgy and coal bureaus put forward a succession of demands for rectification and requirements for checking and acceptance of their own trades. In Wuxi, 11 bureaus of the departments of industry and communications, capital construction and materials and their affiliated organizations worked out detailed rules and regulations for checking and acceptance and the requirements for arriving at a figure, thus enabling the enterprises to have clear targets to aim at and concrete rules and regulations to follow. The consolidation of enterprises of the departments of machine building and their affiliated organizations has been carried out in a down-to-earth manner. By the end of last year, after checking and acceptance, 96 of the 100 key enterprises in the machine building industry throughout the province and one-third of the enterprises comprising all the machine building departments and their affiliated organizations measured up to 12 standards set by the First Ministry of the Machine Building Industry. Overall quality control was carried out in 89 enterprises of departments of the machine building industry and their affiliated organizations, and preliminary results have been achieved as well.

Great efforts should be made to train cadres, workers and staff and raise the vocational, technological and cultural levels of the cadres, workers and staff. To take a big stride towards modernized management, new demands are being set for the cadres, workers and staff. We consider that the building of leading bodies will be focused on having a younger, specialized leadership. Our goal is that there should be no laymen in the leadership within 3 years; in the building of the ranks of staff and workers who are urged to be both red and expert, efforts should be made to raise their quality and to enable leading cadres, technical personnel and technically skilled workers to gradually grasp the domestic advanced skills of management, technology and operation of their own branches and posts and to vigorously upgrade the skills of management, technology and operation of the equipment and technology introduced from abroad to international standards. Since last year, some 12,000 leading cadres in the departments of industry and communications, factories as well as enterprises, have received rotational training. They account for 28 percent of the total number of leading cadres in the departments of industry, communications and factories. The education of the staff and workers has been restored and developed. This year we are planning to further implement the graded training plans and raise training to a new height.

Judging from the situation as a whole, the growth of industrial production and communications in the province is facing a new turning point. From now on, the stress of our work should be placed on racing against time and raising the levels. Though our industries in the initial period are large-scaled and have been built up for 30 years with certain foundations and complete varieties, the technical skills and economic levels are relatively low and managerial skills even worse.

From now on, therefore, we are determined to raise our levels both in ideology and practical work, learn from Shanghai and the advanced experiences of other provinces, cities and autonomous regions and turn out the finest goods possible at low prices with the least possible consumption, thus achieving the best economic results.

CSU: 4006

## GENERAL ECONOMIC INFORMATION

### IMPROVED MANAGEMENT, ADMINISTRATION OF TOURISM CALLED FOR

Beijing JINGJI GUANLI [ECONOMIC MANAGEMENT] in Chinese No 4, 15 Apr 80  
pp 31-33

[Article by Liu Shijie [0491 0013 2638] and Wang Ligang [3769 4539 4584]:  
"Development of Tourism Should Be Done in a Businesslike Way"]

[Text] In order to hasten the growth of tourism and make tourism better serve four modernization construction, a major problem at the moment is creation of conditions for the gradual completion of a change in tourism from heavy government involvement to administration as a business.

#### 1. Institution of Businesslike Management Is an Objective Requirement in the Vigorous Development of Tourism

Tourism is a burgeoning sector of the economy. The people call it a "smokeless industry," and an "indivisible trade." It is an industry in which investment is small, results are quick, costs are low, and profits great. As in other economic sectors, it requires use of economic methods in accordance with the requirements of economic laws to engage in the management of tourism. For example, it requires planned management of tourism in accordance with the requirements of planned proportional development of the national economy; strict economic accounting for tourism according to the requirements of the laws of value; and a clear delineation between rewards and punishments in accordance with the requirements of the laws applying to distribution for work done and material benefits for doing a good job or a bad job in tourism, earning money or losing money, or being rewarded or punished. This is the only way in which tourism can move forward along the right track and the only way in which its fullest role can be brought into play in the national economy. The essence of making tourism a business proposition is the institution of independent economic accounting with accountability for profits and losses, and the arousal of the enthusiasm and creativity of business enterprises and the working masses through economic responsibility and economic benefits to propel the vigorous development of tourism. The experiences of many countries of the world have demonstrated that tourism has to be run in a businesslike way if it is to develop rapidly. Not only must economic ways of doing things be employed

within tourism, but government must also emphasize the use of economic methods and means to foster and support tourism. For example, Spain and Austria adopted liberalized credit terms with the use of low interest loans. Yugoslavia used sharing of the high volume of foreign exchange, and Japan used reduced taxes and tax free methods to encourage development of tourism. We can draw lessons from these experiences.

During the early period of the People's Republic, tourism in China consisted mainly of the reception of foreign guests and international transit business. This was because of the international political and economic situation. In 1964, the government established a travel and sightseeing management bureau primarily for the reception of foreign tourists paying their own way. As a result of the historical development of our country's tourism, and for other reasons, a guiding notion gradually developed in tourism, namely, placing the political reception of tourists first without regard for economic benefits. In the management system, tourism was run as an administrative unit and not as a business management unit. Its methodology was largely reliance on administrative directives rather than use of economic methods to develop business activities. Experience has shown that as history develops, the mentality and the ways of doing things that emphasize political reception without regard for economic benefits in the management of tourism greatly hamper the development of our country's tourism. In the case of accommodations for tourists, for example, we can clearly see the seriousness of this matter. As we understand it, in the cities of Beijing, Shanghai, and Guangzhou, there are only somewhat more than 14,300 beds for the use of foreign tourists. These, plus accommodations in other cities open to tourists, bring the total number of beds to somewhat more than 29,600. In Hong Kong today, there are more than 24,900 beds, and Hong Kong is able to receive more than 1.7 million tourists annually. Thailand has somewhat more than 39,000 beds, and is able to accommodate more than 13 million tourists annually. We, however, with close to 30,000 beds, can accommodate only somewhat more than 100,000 people annually. Why is our tourist accommodation rate so low? The reasons are many. One major reason is that our tourist hotels and restaurants are not run as businesses but rather as administrative units that are reception centers in nature. They are not concerned with accounting or efficiency or profits and losses, and they do not have quotas of foreign exchange or profits to turn in to higher authorities. On the contrary, their losses are subsidized. This shows that unless the tourism management system and management methods are changed, it will be impossible to have large scale development of our country's tourism.

Following the smashing of the "gang of four," the domestic and international political economy posed an extremely beneficial situation for the development of tourism. In 1978, China entertained more foreign tourists than in the previous 24 years. After the work focus of the entire party shifted to socialist modernized construction, the CCP Central Committee decided to vigorously develop an enlightened policy and a clear program toward tourism.

A nationwide tourist work conference also charted a plan, requiring the earliest possible change from administrative methods to businesslike management in order to carry out this arduous task.

## 2. Greater Autonomy for Business Enterprises is at the Crux of Good Tourism Management

Tourism is an economic sector relating to foreign nationals that has strong policy overtones. Therefore, if tourism is to be vigorously developed, there must be a genuine strengthening of centralized and unified leadership, while at the same giving full play to the enthusiasm and initiative of tourist enterprises everywhere must be emphasized and greater autonomy must be given to business enterprises engaged in tourism.

Greater autonomy to tourist enterprises includes greater authority over personnel, funds, and materials by tourist enterprises, as well as greater authority over every aspect of administration and management. This lies at the crux of businesslike management of tourism. Only in this way can independent economic accounting be instituted, responsibility for profits and losses be fixed, and the necessary conditions be created for businesslike management of tourism. In terms of current realities for the development of tourism, the problems most urgently requiring solution through greater autonomy for tourist enterprises are granting to tourist enterprises the right to advertise for tourists, the right to manage hotels and motorcades, and the right to apportionment of foreign exchange and profits.

At the present time authority for attracting tourists to China is centralized in the old main tourist bureau and tourist agency. Local tourist businesses have responsibility only for fulfillment of reception tasks sent down to them by the main bureau or agency; they do not have the right to carry on liaison with foreign tourist agencies concerning sources for tourism. Such a management system seriously limits the enthusiasm and creativity of the broad masses of cadres and employees in tourist enterprises, and it does not yield the most from China's richly endowed tourist resources and large sightseeing facilities.

Because authority for attracting tourists is strictly centralized and managed to death, and because the capability of focal point cities such as Beijing and Guangzhou is limited and their tourist handling capacity small, a situation has come about wherein the focal point cities "cannot eat what they get," while other cities "cannot get enough to eat." If local tourist enterprises were given authority under central unified leadership for a flexible handling of tourists and the development of a regional tourist business, such a situation could be properly solved.

At the present time, tourist hotel and travel management nationwide is extremely ununified. In many places tourist units don't take care of hotels



or travel, and disjointed management is fairly serious. For tourist units not to take care of hotels and travel is like someone running an industry not caring about industrial plants. Inevitably, extreme chaos and losses will be created. Greater autonomy for tourist enterprises must thoroughly solve this disjointed management and institute a unified management so that the tourist business will develop smoothly.

Greater autonomy for tourist business must also conscientiously solve the problem of retention of foreign exchange by tourist enterprises and splitting of profits. At the present time the proportion of foreign exchange retained by tourist enterprises is small and not fixed. Were the amount retained a little larger, tourist enterprises could use it to add some modern tourist facilities to expand the scope of business so that tourist spots and tourist facilities would be more rapidly developed. Additionally, an increase in the amount of profits retained by enterprises would permit use of a portion for the collective welfare of employees of enterprises and provision of awards to individuals' which would be helpful in arousing the enthusiasm of enterprises and the broad masses of their workers. For newly opened tourist areas, during the year in which such areas are opened, foreign exchange income would best be retained by the business enterprises to help them develop tourist sites. The experience of Yugoslavia in permitting retention of large sums of foreign exchange to encourage development of tourism merits application to our own situation. Beginning in 1966 in Yugoslavia, enterprises providing services to foreign tourists could enjoy 20 percent of the foreign exchange income, and business enterprises specializing in tourism could enjoy 60 percent of foreign exchange income. Tourism in China also requires the impetus for development that economic methods such as increased retention of foreign exchange by enterprises and greater autonomy for tourist business would bring.

### 3. Economic Benefit Is the Main Objective in Running a Tourist Business

For a long time, because China's tourism has been run largely for political receptions, there has been "calculation of only the political balance sheet and not the economic balance sheet." This has played a definite role in the promotion of friendly intercourse between the people of China and the people of other countries, and in the development of an international united front, but the economic price we paid has been great. Under present circumstances, it must be made clear that the development of tourism and the garnering of economic benefits to meet China's needs in carrying out the four modernizations is to make a contribution to socialism. We must derive the political gain from tourism. Development of tourism can strengthen the friendly intercourse between the people of our country and the peoples of every country in the world, promote mutual understanding and friendship, bring about exchanges of economic, cultural and scientific techniques, enlarge the united front against hegemonism, and maintain the world peace.

The economic benefits of tourism depend on how much foreign exchange is taken in as well as on how much profit has been made. Every well-run tourist area must be aware of this. The Xijiaoshan tourist area in Guangdong, for example, which was started through arduous toil and operated with frugality, had 310 beds in 1978, which accommodated almost 300,000 people. Foreign exchange earnings were 1.49 million yuan; profits were 400,000 yuan, and rate of return on capital was 27 percent.

If they are to be economically viable, tourist enterprises must strengthen business enterprise economic accounting. They also must steadily develop tourist resources, build more tourist facilities, improve the quality of service, and constantly increase their ability to bring in foreign exchange. At the same time, they must also make careful calculations and do strict budgeting, and manage enterprises with frugality to achieve the goal of obtaining maximum economic results from the minimum expenditure of labor. They must account for the expenditure of human labor and constantly increase the labor productivity rate; they must account for consumption of embodied labor and constantly increase the facilities utilization rate; they must calculate expenditure of funds and constantly accelerate the circulation of capital and economize on the use of capital. While emphasizing economic accounting, it is necessary to overcome one tendency, namely arbitrary increases in prices as soon as increased foreign exchange earnings or profit are mentioned, charging inflated prices for living accommodations, food theater tickets, or entry into parks. It must be understood that such inflation of prices will not increase income since we are running a package price system in tourism. For each tourist entering China, a fixed amount of money is given daily to the tourism authorities, and this includes expenditures for lodging, food, entertainment, and sightseeing. Therefore, when lodging expenses, food expenses, theater tickets and the cost of admission to parks are inflated, all that is changed is the ratio of distribution of the package price fees to each component. On the contrary, to do this could have extremely bad consequences. It could destroy China's reputation and cause serious impairment of tourism in China. This is an issue that must be accorded attention.

Tourism service falls into two major categories. One is the basic service of food and lodging. The other includes beverages, dancing, medical service, athletics, and sales of souvenirs, industrial arts and crafts, and goods. The first category of service is limited, the latter one is unlimited. As tourism develops, tourist requirements for the latter kind of service will become greater and greater, and foreign exchange earnings will also increase. In countries where tourism is advanced, earnings from the latter kind of service amount to 80 percent of total earnings from tourism. In our development of tourism for greater economic benefits, we must keep our eyes peeled for every available means to expand the scope of service, increase the number of services provided, improve administration and management, increase the quality of service, and strive to encourage tourists to spend more money and feel satisfied at doing so.



#### 4. Improvement in Management of Tourist Enterprises Requires Initiative of Appropriate Competition

The tourist business is an international business. The tourist businesses of every country are located together in the world marketplace. Operating under the laws of value, they must launch fierce competition, and it is not possible to suppose that this kind of competition can be avoided. If China intends to develop tourism and run good tourist enterprises, it must recognize this objective situation and courageously participate in worldwide competition. Tourist funds spent during the past several years for travel throughout the world have amounted to about 60 billion dollars. Just what proportion of these tourist funds went to what countries and what businesses? That depended mainly on the competitive position of individual countries and individual businesses. If China's tourism intends to occupy a firm position in the world tourism marketplace and seek rapid development, it must become competitively superior.

A dialectic relationship exists between businesslike tourism and competition. The businesslike nature provides the conditions for competition, and competition provides the possibility for good business management. When administratively managed, tourism becomes a stagnant pond that cannot come alive. Only by making it businesslike, with autonomy in operation under the guidance of the state plan, can it be operated in a lively manner, and only then can competition begin to take place. At the same time, only through participation in competition can enterprises compare themselves with each other and appraise each other, and only in this way can enterprises have objectives from which they can learn. Additionally, since the loser in competition must run the risk of being eliminated, this inevitably places some pressure on the operators of tourist enterprises, forcing them to manage their enterprises well in order to keep their superior competitive position. Tourism in China has just begun, and abundant natural tourist resources are our most beneficial asset in the development of tourism. It must be realized, however, that we still lack experience in running tourism well, and that we have neither developed, used, nor preserved our tourist resources well. Our tourist facilities are poor, quality of service is still low, and the management level of enterprises is still not high. To turn this situation around so that China's tourism stands in the front ranks of the world will require courageous initiation of competition by every enterprise in the country, participation in the competitive ranks of world tourism, learning, in the course of competition, the beneficial experiences of foreign countries, and improvement, through competition, of our own management of tourist enterprises.

In launching competition in the world marketplace, we will have to compete in resources, in facilities, in service, and in price. In order to obtain a commanding position competitively, Yugoslavia adopted the policy of "small profits on quick turnover." In a situation in which facilities and quality of service were largely the same as in other countries, prices

that were generally 10 percent lower than in other countries attracted large numbers of tourists to Yugoslavia. In this way, though reduced foreign exchange earnings were made on each individual tourist, because of the increase in the number of tourists, the total sum of foreign exchange derived was greatly increased. This method provides us a model to follow.

9432

CSO: 4006

## GENERAL ECONOMIC INFORMATION

### NEI MONGGOL CONFERENCE REPORTS 470 JOB-RELATED DEATHS

SK281313 Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 27 Sep 80

[Excerpts] The recent regional work conference on labor protection held in Hohhot urged all localities, departments and leading cadre of enterprises throughout the region to earnestly draw lessons from the Bohai No 2 accident, strictly enact state regulations on labor protection, strive to restore production safety and labor protection work to the best level on record at the earliest possible date, guarantee workers' production safety and contribute more to the four modernizations.

According to statistics compiled by a department concerned, there have been 470 accident-related deaths in the region's mines, plants and enterprises over the last year or so. To rapidly transform the region's present situation in which accident-related deaths occur frequently, occupational diseases prevail and environmental pollution is expanding to a serious degree, the conference put forth the following demands:

1. Leading groups at all levels must draw lessons from the Bohai No 2 accident, overcome bureaucratic workstyle, refrain from giving blind orders and put great store on workers' safety and health in the production process.
2. Step up leadership over labor protection work, consolidate and replenish labor protection organs and realistically solve existing problems. Trade unions at all levels should organize workers to supervise and assist enterprises' administrative leaders in adopting safety measures and improving working conditions. So far there are only 31 beds for occupational disease in our region. This far from meets the need to provide cures for occupational diseases.
3. Strengthen the socialist system and strictly enforce the laws and regulations on labor protection. We should earnestly deal with the accidents which occurred since last year and find out whether the plant directors or secretaries are responsible.

The conference was sponsored by the regional people's government. Hao Fushan and Chen Bingyu, deputy chairmen of the regional people's government, presided over the conference and delivered reports.

## FUELS AND POWER

### WASTE HEAT USED FOR POWER GENERATION IN SICHUAN

Chengdu SICHUAN RIBAO in Chinese 4 Jun 80 p 1

[Article by Zhong Jinqi [6945 6651 3825]: "Our Province Is Successfully Using Waste Heat To Produce Electricity; Generators With the Capacity To Generate Over 29,000 Kilowatts of Electricity From Waste Heat Have Already Been Installed, While 30 More Facilities With a Capacity of Over 52,000 Kilowatts Are Under Construction"]

[Text] In recent years, with the backing of the higher level officials, some of the industries and enterprises in our province have achieved notable success in using waste heat to generate electricity. Based on initial statistics, up to the present 16 enterprises in the province, such as the Chongqing Copper and Iron Company, the Sichuan Sulfuric Acid Plant, the Penglai Salt Works, and the Weiyuan Copper and Iron Mill, have already installed generators using waste heat. The capacity of the installed generators totals over 29,000 kilowatts, in 1 year they can save over 92,000 tons of anthracite coal. Now the construction of 30 waste heat electric generators at the Sichuan Chemical Plant, the Zigong and Daan Salt Works, the Luzhous Carbon Black Plant, and the Neijiang Sugar Mill is being accelerated (when installed, these generators will have a capacity of over 52,000 kilowatts. After construction of these installations is completed, the capacity of the installed waste heat electric generators in the province could reach over 81,000 kilowatts, so that with annual electric needs of over 480 million kilowatt hours, the annual savings in coal could be over 240,000 tons.

Our province's industries have abundant resources of waste heat. Based on a 1979 investigation of the utilization of thermal energy in key enterprises of the province, waste heat resources totaled the equivalent of over 3 million tons of coal. Of that total, over 1.7 million ton-equivalents are usable, with over 500,000 ton-equivalents usable for waste heat generation of electricity, so that we could install generators for over 100,000 kilowatts. Besides this, there are over 200 heating boilers larger than 10 tons whose steam, equaling a total of over 3,000 ton-equivalents, could also be used to generate electricity, allowing the installation of electrical generators with a capacity of over 100,000 kilowatts. In the past, not only were

these precious resources wasted to no purpose, but moreover they created environmental pollution, causing considerable harm. At the same time, many factories and mines, because of a shortage of electricity, could not start work, affecting production. This was especially true in the dry season, when the lack of electricity is even more obvious. We have said enough: using our province's abundant resources of waste heat to generate electricity is a rational use of resources and an important measure for speeding the development of the four modernisations.

The use of waste heat to generate electricity will alone attain many different objectives that benefit the nation, enterprises, managers and workers, and the masses. For example, the Weijuan Copper and Iron Mill installed a 3,000-kilowatt electrical generating unit that by 12 May was officially generating electricity by using coal gas from its blast furnaces. By doing this, the mill supplies 70 percent of its own electrical needs, lightens the pressure in the general electrical grid, and supports national reconstruction. Moreover, it can save the equivalent of 16,000 tons of coal every year, guarantee the electricity needed for production, and reduce the cost of producing steel as well. Simultaneously, this will solve the problem of the pollution released into the air by the coal gas from the blast furnaces, thus helping to protect the health of the plant's managers and workers and the masses in the areas around the mill. The Sichuan Sulphuric Acid Plant, in order to utilize the high-temperature waste heat of the sulphur dioxide coming from the sulphuric acid boilers, has installed waste heat boilers matched with two 1,000-kilowatt generator installations; last year they produced a total of 5 million kilowatt hours of electricity, fulfilling the basic production needs and creating 400,000 yuan in the value of production. Now this plant is remodeling one generator so that it will have a capacity of 3,000 kilowatts, after which the plant's production will supply all of its own electricity and heat. At the Penglai Salt Works, the Langzhong and Sichou Electric Powerplants, the Miyi Sugar Mill, and other enterprises, existing heating boilers are also used to generate electricity. By first generating electricity and then using the steam for production, the effective rate of utilizing thermal energy is raised, while energy is saved; the value of goods is raised while production costs are lowered. Presently, under the impetus of these enterprises that have already realized the generation of electricity from their waste heat, the industries and enterprises of our province are just about to choose from among the available options for using waste heat to generate electricity and are ready to proceed step by step into an intensive development of these resources.

9504

CSO: 4006



## MINERAL RESOURCES

### DEVELOPMENTS IN MINING AUTOMATION REPORTED

Beijing MEITAN KEXUE JISHU [COAL SCIENCE AND TECHNOLOGY] in Chinese No 7, Jul 80 pp 2-4

[Article by Liu Zuoshu (0491 0155 6615), Ye Guisen (5509 2710 2773) and Pan Shangda (3382 1424 6671) of the Tangshan Research Institute, Research Academy of Coal Science: "Developments in China's Automated Coal Mining Technology"]

[Text] With the rapid development of China's national economy, the various sectors are making greater and greater demands for more and better coal products. At present, China's coal mining industry is moving towards centralization, mechanization and technological modernization; thus, the growing output in coal mining is bound to stimulate the development of automated coal mining technology.

#### Automated Mining and Conveyance Control Systems

China has successfully developed an electronic control unit for MD-150 coal mining machines. The unit consists of a MDZ-2 carrier wave controller, a FYK radio remote control transmitter and a SYK remote control receiver, and enables the operator to gain full control over both the coal mining machine and conveyor. The effective radio transmission range is 10-15 meters. The FYK radio transmitter is portable and can send 10 groups of audio frequency modulated signals at the transmission frequency of 151 MC. Mounted on the machinery unit, the MDZ-2 carrier wave transmitter sends 465 KC audio frequency amplitude-modulated waves into the power cable of the coal mining machine via a high voltage isolating capacitor. The radio remote control receiver and carrier wave receiver are equipped with safety devices to guard against errors made by the operator, and to automatically shut off the current in the event of malfunction.

The control device of the current type of coal production face and trough type double chain drag conveyor is composed of a control box, display box and detector. Piezoelectric porcelain components ranging 39-199 KC in frequency are used in 30 circuits which include two signal frequency circuits and 28 control circuits. Each unit can control 10 coal conveyors,

including the sequence delayed starting of counter flows, and the instant halting of the entire conveyor line, as well as protection against common accidents, such as chain breaking, chain tilting, motor jam, etc. Through contact signals, start-up offer signals and accident alarm signals, the system can provide timely information on the operation and accident status of all the conveyors.

Complete sets of equipment have also been developed for mining area control systems, i.e. the YZK trough type and work face conveyor control systems. The YZKD-1 trough control console and YZKX-1 trough control box, YZBJ remote alarm box are combined into a trough-type accordion belt conveyor line control system. The system includes a self monitoring link which enables concentrated control over 2-4 trough belt machines. The operation status of the conveyor can be observed from the console. A selective phone is used to send out audio frequency signals for starting and accident alarm.

The YZKD-2 work face console and YZKX-2 work face control box comprise a work face conveyor and transfer machinery control system, which allows the work face conveyor and transfer machine to send pre-start offer alarm signals; starts and stops the double hauling of the conveyor's upper and lower units; starts and halts the transfer machine. The console can indicate transfer and sudden stops, and can warn the operator when accidents occur. Sudden halts can be executed at the work face. There is an indicator for lockouts, and the console includes a self checking device which can prevent the system from starting by itself in the event of malfunction.

The preceding devices and work face selective phones are safety spark equipments which are light, convenient, flexible and safe to use in underground mines.

#### Automatic Control of Belt Conveyor Systems in Mines

In China, more and more belt conveyors are being used as means of conveyance in large mine tunnels and major inclined shafts. At present, coal belt conveyor systems basically fall into two categories: the first kind consists of common belt conveyors, each measuring 100-300 meters in length. The conveyors are directly linked together with no buffers in between. This type of system requires strict interlocking. The other kind of belt conveyor system consists of highly intensive steel cord belt conveyors, each measuring over 1,000 meters in length. Relatively large buffers are installed between the conveyors which do not require strict interlocking. In the first type of belt conveyor system, three SYK mining telemechanical devices are used to automate the entire system. SYK devices are suitable for telemechanical systems designed for scattered coal sites. The conveyance distance can reach as long as 10 kilometers. Signal transmission is carried out by three components: the control end in the central control room, the execute end located in the controlled object of signal focus section, and the electric cable for signal exchange. The device works on a time sharing system; at the control end and execute end, there are X-distributors and Y-distributors. Effective synchronized measures are

adopted. The system also employs such links as address calling, address answering and address checking to ensure information exchange between only one execute end and the control end at a given time. In the second type of belt conveyors, electronic computers are being developed for the control system. Besides performing SYK functions, the system can also perform remote adjustment, and optimum control over the system is attained. Its telemeter, tele-signal, remote control and remote adjustment information is passed on to the computer via a "telemechanic information terminal."

#### Mine Communication System

The communication system used in mines is an important means of mine production control and management, interconnection and guarantee to production safety. Due to the great diversity of working conditions and poor environment in the mines, plus the increasing mechanization of the working face, the employment of one kind of communication mode can not meet the various requirements of underground mine production. To cope with this situation, our country has developed such communication devices as amplifying telephones, induction telephones, carrier wave telephones, mine shaft telephones and mine rescue telephones. Now we have also begun to study ways of producing mining dial telephone exchanges and control telephones with the aim of creating good communication network conditions for our country's coal mines.

In large and medium coal mines with relatively heavy vertical and transversal communication traffic, the communication networks consist of master systems which are composed of dial telephone systems for miners, and subsystems which are made up of the communication equipment units of various production links. The transition of exchange users from safe zones (above the mine pit) to unsafe zones (underground mine) is accomplished with the use of safety spark grids. The subsystems actually employ a great variety of communication means to meet the specific requirements of the various production links. For example, China has developed the YZ series of communication, signal, control devices; its communication system is suitable for comprehensive mechanized mining areas. The device has a YZKY safety spark amplifying telephone unit along the 12-15 meter border line in the work face. Several YZXH selective phones are installed in the mining area which can call up eight communication parties. For mobile personnel, the system provides YZBX portable telephones. The user can contact the ground surface control phone through the system. Owing to its safety spark feature, the equipment is light weight, low cost and easy to use.

In medium and small coal mines where transversal communication traffic is not heavy, the communication systems consist of production control phone exchanges for mining use, and extension phones. Owing to the high level of noises, plus the difficulty of setting up a separate communication line, the subsystems in a mechanized mining work face rely on carrier wave amplifying phones for communication. Developed and manufactured in China, the XZ carrier wave amplifying telephone and control device use the power line as a passage for signal and voice communication, and the system works on

audio frequency modulated carrier waves. The techniques are pretty well adapted to the scattering characteristic of power network's high frequency parameter. The telephone carrier frequency is 100, 120 KC, and the control carrier frequency is 84, 91 KC.

The two preceding communication network subsystems also include the following production links: large belt conveyor tunnels, electric locomotive conveyor tunnels, tunnelling work face, and rail tracks up and down the mountains. Based on their characteristics, induction phones or carrier wave phones may form their own communication networks.

To facilitate communication in coal mining production areas, independent communication systems are also installed. For instance, mine shaft phones and mine rescue phones. The currently produced XC-76 mine shaft phones have working frequencies of  $48.31\text{MC} \pm 2\text{KC}$  and 1 meter soft antennas; space propagation is carried out through radio waves, induction propagation is performed with the help of steel cables. They can provide reliable communication liaison in vertical mine shafts for as deep as 1,000 meters. Moreover, they can be used for short distance voice communication between various places on the ground surface.

#### Monitoring Underground Mining Environmental Parameters and Control Over Mine Ventilation Networks

With the continuous rise of mechanization level and coal production output, the problem of ensuring mine safety production is becoming more and more acute with each passing day. Thus, it is especially important to quickly come up with ways of monitoring the underground mining environmental parameters and controlling the ventilation networks.

The MJC-100 coal mine centralized testing device is developed for conducting round-the-clock continuous checking rounds and automatic warning. It can automatically type out tabulated reports at certain time intervals. The MJC-100 centralized testing device is composed of an underground gas alarm, underground carrier wave transmitter, power box and ground surface main frame, and printer. The gas alarm uses a gas concentration analog meter. The surface main frame can be displayed with 3-digital fixed points or progressive points; when the gas contents exceed the limit, the alarm is set off both below and above the ground level at the same time. Moreover, tabulated reports are printed whenever the gas contents exceed the limit and return to the boundary.

At present, China is trying to develop computerized controls for ventilation systems. As gas contents signals enter the computer, optimum air flow regulation is obtained in accordance with the specific requirements and the air flow speed testing system's computing network, thus controlling the underground mine ventilation system, and regulating the air flow throughout the mine pit in accordance with the gas concentration.



Due to the realization of automated control of the safety parameters in the ventilation system, and owing to the centralized monitoring and automated air flow regulation which has widened the gas limit range of the work face air return flow by 0.5 percent, the production output in the coal mining face has greatly increased.

#### Automated Coal Separating Plant

At present, the primary tasks in realizing the automation of coal separating plants in our country are: materialize centralized programmed control over the machinery equipment of coal separation plants; materialize process control over the major production operations, such as jigging, flotation and dense medium separation, thus creating conditions for optimum control over the entire plant's production; implement automatic testing of the quality and quantity of intermediate products and final products in the course of coal washing.

In Xuzhou, the Jiabei Coal Washing Plant has a central centralized control room equipped with a variety of capabilities such as operating, controlling, testing, warning and recording. The control room employs a digital integrated circuit control system. Logical control over the entire plant's raw coal preparation, jigging and flotation systems is established in accordance with technological requirements. The analog panel in the control room is equipped with many kinds of testing meters and light indicators showing the operational status of the equipment. In addition, it can send accident alarm signals.

The automatic discharger of the jigging machine plays an important role in ensuring the quality of coal washing as well as the improvement of washing efficiency. To control the rotation speed of its direct current motor, the automatic discharger of the jigging machine relies on bed thickness transducers which send out signals containing information on the variation of beds with high specific gravity.

To automatically check for fine dust in washed coal, China has developed the STH digital low energy gamma ray dust tester. Using americium -241 ( $\text{Am}^{241}$ ) as radiation source, the instrument is fairly accurate. When the dust content of the coal sample is 4-15 percent, the average error of the ratio between the measurement value and chemical testing value does not exceed  $\pm 0.33$  percent.

There are many factors which affect the index of flotation. The automated regulation of flotation technological parameters can help maintain the major technological parameters of the flotation operation at optimum values for a long period of time with considerable stability, thus obtaining fairly good economic results.

The automatic control system of flotation technological parameters can help maintain a constant ratio between the feed-in concentration/flow of frothing



agents and collecting agents, as well as the ratio between the volume of added chemicals and volume of dry coal processing.

Concentration and flow are the main controlled parameters of the system. The concentration gauge sends out concentration signals which are used as feedback signals and put into the regulator. Its given value is set in advance by the operator. The flowmeter outputs pulp flow signals which are used as feedback signals for another regulator whose given signal is the output value of the first regulator.

The flow regulating system is a simple feedback regulating system. The feedback signals are obtained by adding the output signals from the bottom pulp flowmeter and industrial fresh water flowmeter. The concentration signals and flow signals are multiplied, thus forming dry coal volume signals. As the chemical flow is in direct proportion to dry coal, the signal can be output from the multiplier and used to control the rotation speed of the "fixed volume--ratio pump," thus realizing automation in the feeding of chemicals.

9119

CSO: 4006

## CAPITAL CONSTRUCTION

### TIANJIN HOUSING PROCEEDS, BUT MANY PROBLEMS REMAIN

Tianjin TIANJIN RIBAO in Chinese 13 Jun 80 p 1

[Article: "The Pace of Housing Construction Is Further Quickened"]

[Text] While visiting housing construction in our city during the golden season for construction, this reporter was first told by officials: In the 30 years since liberation, Tianjin's new construction of housing for managers and workers has totaled 10 million square meters. Last year alone, newly constructed housing totaled 2 million square meters, and for the coming year a further 2 million square meters of housing are planned. In the next several years, new housing will be constructed on an even larger scale and at an even faster rate.

The nation is fully prepared for this effort. But deficits in the standard of living can be corrected only gradually. While covering this story, what most impressed this reporter was the fact that from the leadership organizations to the basic units constructing the buildings, everyone is carefully investigating how to invest the limited manpower, material, and financial resources available for housing construction so as to bring them fully into play and to maximize their economic efficiency. Everyone summed up many years of experience and instruction, especially those of the past 2 years, by concentrating on one-point--the need to strictly obey the fundamental rules of construction and to carry them out according to basic construction procedures. If everything is done in this way, housing construction will be much faster and of better quality. Or to put it another way, there then will be less slowness and waste. For example, at the new 100,000-square-meter residential area at Dingzi Gu, where construction started the year before last, they had previously repaired and built roads, and so the whole process of construction went very smoothly, there was coordination between the builders and the city government, and the aboveground and belowground tasks were coordinated with each aspect of construction effort and each item of engineering, so that delays and conflicts between these aspects was reduced a great deal, quickening the progress of construction and improving the quality of engineering. Until now, fundamental rules of construction had been violated and work was not done in accordance with basic construction procedures, with the result that

the problem of construction being thrown into confusion is still very serious. For example, there are building sites where planned duties were changed after the construction team was already set up. At some construction sites, aboveground tasks had already been started although planning for belowground tasks had just begun. The structures at some sites were already complete, but the installation of living features had not yet even been planned. At still other sites, because the relocation problems of several households--even as few as one or two--were not resolved, the entire construction was halted. Those who are "experienced in construction" all recognize that these situations reflect the key points of construction progress and engineering quality, and that violating them produces the greatest waste of labor, material, and money. They demand a decision by the concerned authorities urgently to reform rules, plans, capitalization, and materials, as well as the system for managing construction, in order to meet the needs of large-scale, rapid, and high-quality housing construction.

Accelerating the construction of housing, opening new residential areas, and renovating old housing all must be started at the same time. Nevertheless, there are many unimaginable difficulties and resistance to the thorough implementation of this policy. In some newly opened residential areas away from the city center, there are buildings that have been completed for several years but are still unoccupied. Each day, employees are required to guard these buildings. Doors, windows, and fixtures have already been broken. This is a great waste! We want the residents to understand in general the reasons for these situations: if new housing areas are not properly opened, and if the area of several of the city's wards are enlarged, the problems of communication between city center and wards, of overcrowded housing, of city landscaping, of beautification, and of cleanliness and quiet are fundamentally insoluble and will seriously affect the development of the four modernizations and the modernization construction in the city. In the whole city, environmental pollution is currently most severe in Quanyechang and Xiaobailou in Heping Ward, where the population is most concentrated. Why has the incidence of incurable illness increased in recent years? It is said that it is a direct result of environmental pollution. If this problem is not solved, it will be a disaster not only for us now but also for our children and grandchildren. From what the concerned leaders say, we must earnestly survey some households as to why they would rather be packed together and are unwilling to move into newly opened residential areas. We must use all available means to resolve each type of difficulty encountered in the lives of people living in the new residential areas, and introduce new economic measures to encourage people to move into these new residential areas.

The outstanding problem in the restoration of older residential areas is the tearing down of older houses and the relocation of their occupants. The Chengrean quarter is an area that was inspected personally by Chairman Hua. The older houses were to be cleared as far as the highway at the end of Shanxi Road, but because the construction supervisors were unable to resolve the relocation of one or two households, the new construction

was severely affected and, in the end, the construction teams were forced away. Of the original plan to construct 39,000 square meters, only 18,000 square meters have been completed after over 3 years. The tearing down of older houses and the relocation of their inhabitants are the greatest cause of our headaches. If this problem is not solved successfully, it will influence the large-scale and rapid construction of housing, and it will also affect the improvement of housing conditions for the broad masses of residents. Sometimes the occupants of the houses to be torn down are unreasonable and shameless. We hope the city authorities will take economic or legal sanctions against those residents who have shown themselves to be impervious to reason.

When they discuss how to speed up the rate and raise the quality of housing construction, "experienced builders" all feel that last year's implementation of the title of "Excellent worker from start to finish," a form of collective praise, was successful, mobilizing the positive and good experience of cadres, engineering technicians, and the masses of workers. According to the statistics of the Municipal Construction and Engineering Bureau, the bureau's labor productivity rate last year was, on average, over 40 percent and for the whole year, except for a reduction in the payment of bonuses, the labor component of construction costs fell around 20 percent. This year the engineering progress, quality, and economy were again raised. "As the tolling of the bell is ineffective, government policy is ineffective." Those old hands think that we should carefully use the conclusions drawn from this experience and continue to liberate thought, and that we should bravely do our research and initiate a set of positive methods capable of advancing the mobilization of the large number of cadres, engineering and technical personnel, and the masses of workers. They suggested that construction enterprises should, like other industries and enterprises, greatly expand their freedom of practice and energetically implement a contract system that strives to have construction enterprises put guaranteed labor and guaranteed price arrangements into practice in an orderly way, so as to join together even more rigorously speed, high quality, and quantity in housing construction and the interests of the individual workers and managers in construction units.

9504

CSO: 4006

## FOREIGN TRADE

### BRIEFS

GUANGDONG REEXPORT PROCESSING--Since launching operations for the processing and assembly of imported materials, compensatory trade, and joint ventures, etc., over a year ago, business has been brisk in Guangdong. By the end of July, more than 4500 contracts and agreements had been signed throughout the province. Processing fees have already totalled more than US \$810 million, and investments by foreign firms come to more than US \$640 million. The launching of these projects has helped to bring in advanced technology, more than 300,000 pieces of equipment, and involves more than 100,000 people. [Hong Kong WEN WEI PO in Chinese 25 Sep 80 p 3]

CSO: 4006

END



**END OF**

**FICHE**

**DATE FILMED**

22nd Oct 1980

*Lw*